Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-28 (canceled)

29. (New) A method of producing spray dried particles suitable for inhalation comprising:

a) selecting a dew point of a drying gas corresponding to a targeted median geometric diameter, targeted median aerodynamic diameter and a targeted tap density of particles formed by contacting a sprayed liquid feed with the drying gas;

b) generating a drying gas having said selected dew point; and

c) contacting the sprayed liquid feed with the drying gas having said selected dew point thereby producing particles having the targeted median aerodynamic diameter, targeted tap density and targeted median geometric diameter, wherein said particles are suitable for inhalation.

30. (New) The method of Claim 29 wherein the drying gas is selected from the group consisting of air, nitrogen, argon and any combination thereof.

31. (New) The method of Claim 29, wherein the dew point is in the range between about 0° C and -40° C.

32. (New) The method of Claim 29, wherein the aerodynamic diameter is less than about 5 microns.

33. (New) The method of Claim 32, wherein the aerodynamic diameter is less than about 3 microns.

34. (New) The method of Claim 29, wherein the tap density is less than about 0.4 g/cm^3.

35. (New) The method of Claim 34, wherein the tap density is less than about 0.1 g/cm^3.

36. (New) The method of Claim29 wherein the drying gas has a temperature of between about 80° C and about 200° C at the inlet.

37. (New) The method of Claim 29 wherein the drying gas has temperature between about 35° C and about 80° C at the outlet.

38. (New) The method of Claim 29 further comprising separating the spray dried particles from waste drying gas.

39. (New) The method of Claim 29 further comprising collecting the spray dried particles.

40. (New) The method of Claim 29 wherein the liquid feed includes a solvent selected from the group consisting of an organic solvent, an aqueous solvent or any combination thereof.

41. (New) The method of Claim 29 wherein the spray dried particles comprise a bioactive agent.

42. (New) The method of Claim 29 wherein the spray dried particles comprise a phospholipid.

43. Particles formed by the method of Claim 29.

44. (New) A method for forming particles suitable for inhalation having a targeted aerodynamic diameter comprising the steps of:

(a) atomizing a liquid feed to produce liquid droplets; and

(b) contacting the liquid droplets with a drying gas having a dew point corresponding to forming particles having the targeted diameter,

thereby drying the liquid droplets to form the particles wherein said particles are suitable for inhalation.

45. (New) A method for producing particles suitable for inhalation comprising:

a) atomizing a liquid feed to produce liquid droplets; and

b) contacting the liquid droplets with a drying gas having a dew point corresponding to forming particles having an aerodynamic diameter of less than about 5 μm and a tap density of less than about 0.4 g/cm^3.

46. (New) The method of Claim 45 wherein the particles have a tap density less than about 0.1 g/cm^3.

47. (New) A method for producing particles suitable for inhalation comprising

(a) spraying a liquid feed comprising a biologically active agent; and

(b) contacting the sprayed liquid feed with a drying gas having a dew point corresponding to a targeted aerodynamic diameter for the particles,

thereby drying the sprayed liquid feed to form the particles suitable for inhalation.

48. (New) A method for spray drying particles suitable for inhalation having a targeted tap density comprising:

(a) correlating vapor contents of a drying gas with tap densities of particles formed by contacting a sprayed liquid feed with the drying gas;

(b) selecting a vapor content corresponding to the targeted tap density;

(c) generating a drying gas having said vapor content; and

(d) contacting sprayed liquid feed with the drying gas having said vapor content, thereby producing particles having the targeted tap density and wherein the particles are suitable for inhalation.

49. (New) A method for producing particles suitable for inhalation and having a targeted aerodynamic diameter comprising:

(a) correlating vapor contents of a drying gas with aerodynamic diameters of particles formed by contacting a sprayed liquid feed with the drying gas;

(b) selecting a vapor content corresponding to the targeted aerodynamic diameter;

(c) generating a drying gas having said vapor content; and

(d) contacting the sprayed liquid feed with the drying gas having said vapor content thereby producing particles having the targeted aerodynamic diameter and wherein said particles produced are suitable for inhalation.

50. (New) A method for producing spray dried particles having targeted aerodynamic properties comprising the steps of:

(a) controlling the solvent vapor content of a drying gas to a level selected to form spray dried particles having a targeted aerodynamic diameter or a targeted tap density;

(b) atomizing a liquid feed to form liquid droplets; and

(c) contacting the liquid droplets with the drying gas, thereby drying the liquid droplets to form spray dried particles having the targeted aerodynamic properties.

51. (New) A method of producing spray dried particles suitable for inhalation comprising:

a) selecting a dew point of a drying gas corresponding to a median aerodynamic diameter of less than about 5 μm, a tap density of less than about 0.4 g/cm^3 and a geometric diameter of less than about 30 μm of particles formed by contacting a sprayed liquid feed with the drying gas;

b) generating a drying gas having said selected dew point; and

c) contacting the sprayed liquid feed with the drying gas having said selected dew point thereby producing particles having a median aerodynamic diameter of less than about 5 μm, a tap density of less than about 0.4 g/cm^3 and a geometric diameter of less than about 30 μm, wherein said particles are suitable for inhalation.

52. (New) The method of claim 29 further comprising the step of maintaining the temperature of the dew point of the drying gas to an accuracy of at least 1° C.